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10/625,605	07/24/2003	Alberto Peisach	60783.000005	7920

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HUNTON & WILLIAMS LLP
INTELLECTUAL PROPERTY DEPARTMENT
1900 K STREET, N.W.
SUITE 1200
WASHINGTON, DC 20006-1109

EXAMINER	
BUTLER, PATRICK NEAL	

ART UNIT	PAPER NUMBER
1791	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/625,605	PEISACH ET AL.	
	Examiner	Art Unit	
	Patrick Butler	1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 April 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *15,17-19 and 21-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *15,17-19 and 21-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 15 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over McHenry et al. (US Patent No. 4,667,454).

With regard to Claims 15 and 18, McHenry et al. teach a method for forming a plastic container for thermal food sterilization processing with a selectively deformable surface (abstract), comprising: selecting at least one polymer for a plastic container (column 4, lines 48-61); and thermoforming a container from the heated polymer (column 3, line 39); wherein the plastic container comprises: a mouth; a bottom surface; and a container wall between the mouth and the bottom surface (Figure 1C) wherein the bottom surface of the container is formed to consist of an arcuately curved surface (Figure 1C, approximately from ref. no. 9a inward) contiguous to a concentric ring (Figure 1C, approximately from ref. no. 9b to 9a), wherein both sides of the curved surface of the bottom surface are concave to the body cavity (Figure 1C, approximately at Ref. No. 7), and the concentric ring is proximate to both the curved surface and the container wall (Figure 1C); wherein further the concentric ring is substantially planar between the curved surface and the container wall (Figure 1C, approximately from ref. no. 9b to 9a); wherein further one of the outwardly flexed bottom surface or the

container wall is configured to flex inward into the cavity of the plastic container during cooling of the plastic container following hot-filling of the container with food product (Figure 1B); wherein further the inward flexing of the bottom surface of the container wall reduces a pressure differential between the inside of the container and atmospheric pressure when either the container is hot-filled with food product or when the container is transported from a locale of lower atmospheric pressure to higher atmospheric pressure (reduction of volume will inherently perform this task); and wherein further the non-flexing surface maintains the same form from prior to hot-filling or transport, wherein further the flexing surface maintains its inwardly flexed configuration following cooling of the hot-filled container (Figure 1A and 1B). The Examiner interprets the wall in Fig. 1C to start outside of ref. no. 9b principally because that point begins the outer rise, after leveling off between 9a and 9b, of the structure.

McHenry et al. do not disclose expressly that the plastic sheet is heated to its VICAT temperature before thermoforming.

However, Examiner takes Official Notice that it is well known to heat a plastic sheet to its VICAT temperature before thermoforming.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to heat the plastic sheet to its VICAT temperature before thermoforming since Examiner takes official notice that heating a plastic sheet to its VICAT temperature before thermoforming is well known in the plastic forming art.

The examiner recognizes that all of the claimed effects and physical properties are not positively stated by the reference(s). Note however that the references teach all

of the claimed ingredients, process steps and process conditions and thus, the claimed effects and physical properties would necessarily be achieved by carrying out the disclosed process. If it is applicants' position that this would not be the case: (1) evidence would need to be presented to support applicants' position; and (2) it would be the examiner's position that the application contains inadequate disclosure in that there is no teaching as to how to obtain the claimed properties and effects by carrying out only these steps.

With respect to the preamble and content of Claims 15 and 18 regarding what the container is for (packaging a hot-filled food product), a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. As it is capable of performing the use, it meets the claim. It is also noted that an actual step of packaging a hot-filled food product is absent.

With respect to Claim 17, McHenry teaches thermoforming a container from the heated polymer (column 3, line 39) with processes including injection molding and blow molding (see col. 11, lines 29-35 and col. 13, lines 28-34).

With regard to claim 19, McHenry et al. teach that the thickness of the container walls decreases from a point substantially at the mouth (figure 5, T2) to a point substantially at the bottom surface (figure 5, T5).

Claims 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over McHenry et al. (US Patent No. 4,667,454) as applied to claim 18 above, and further in view of Hodson et al. (US Patent Application Publication No. 2002/0187290).

With regard to claim 21, McHenry et al. teach the invention of claim 18 as discussed above, but does not explicitly teach that the circumference of the mouth is greater than the circumference of the bottom surface. Hodson et al. teaches a container for food storage that can be used with a hot fill application (paragraph 0057) in which the circumference of the mouth is greater than the circumference of the bottom surface (figure 3). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to create a container where the circumference of the mouth is greater than the circumference of the bottom in the process of McHenry et al. The motivation to do so would have been to facilitate easy removal of a semi-solid food product from the container.

With regard to claims 22-26, McHenry teaches thermoforming a container from the heated polymer (column 3, line 39) with processes including injection molding and blow molding (solid phase pressure forming) (see col. 11, lines 29-35 and col. 13, lines 28-34) of polypropylene and a barrier layer of ethylene-vinyl alcohol copolymer (barrier enhancement agent) and an adhesive layer (see col. 4, lines 48-61).

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over McHenry et al. (US Patent No. 4,667,454) in view of Hodson et al. (US Patent Application Publication No. 2002/0187290) as applied to claim 26 above and further in view of Hope et al. (US Patent No. 5,202,192).

With regard to claim 27, McHenry et al. in view of Hodson et al. teach the invention of claim 26 as discussed above, but do not explicitly teach that the adhesive contains an antioxidant. Hope et al. teach a plastic container comprising an adhesive blend containing an antioxidant (column 2, lines 66-68). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add an antioxidant to the adhesive taught by Hodson et al. The motivation to do so would have been protect the food contained in the container from oxidation.

Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over McHenry et al. (US Patent No. 4,667,454) in view of Hodson et al. (US Patent Application Publication No. 2002/0187290) as applied to Claim 22 above, and further in view of McHenry et al. II (US Patent No. 4,554,190).

With respect to Claim 28 McHenry II teaches a plastic container with the components of McHenry (polypropylene, EVOH, and adhesive) (see col. 18, lines 39-42). The components are 89% PP (80-90%) (see col. 18, lines 39-42), which meets the limitations of the claim.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine McHenry II's plastic component portions with the structure taught by McHenry because McHenry II's invention is within the same field of endeavor as McHenry as it is directed to making plastic containers (abstract) and contains the same components (see col. 18, lines 39-42).

Claims 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over McHenry et al. (US Patent No. 4,667,454) as applied to claim 18 above, and further in view of Agrawal et al. (US Patent No. 4,497,855).

With respect to Claim 29, McHenry teaches making a container as previously described. Moreover, McHenry expressly teaches varying wall thickness to accommodate stress (see col. 6, line 59 through col. 7, line 2) but does not expressly teach that the plastic container is formed from a plastic sheet having one or more layers and wherein further the thickness of the container walls are about 70-80 volume % of the thickness of the plastic sheet at a location substantially adjacent to the container mouth and about 20-40 volume % of the sheet at a location substantially adjacent to the bottom surface, and the thickness of the bottom surface is about 15-20 volume % of the thickness of the plastic sheet.

Agrawal et al. teach a range of preform, neck, wall, and bottom thicknesses that anticipate the ranges described by claim 29. Agrawal et al. teach that the preform may be 1,250-5,000 μm thick (column 6, lines 15-18), the wall thickness may be 250 to 900 μm thick, the bottom may be 250 to 1,800 μm thick and the shoulder area may be 350-1,250 μm thick (column 12, lines 52-61). For example, the claimed thickness is satisfied by Agrawal's when the preform is 1,600 μm thick, the shoulder is 1,250 μm thick, the wall is 600 μm thick, and the bottom is 300 μm thick.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Agrawal's preform and container thicknesses in

McHenry's method of making a container to further McHenry's accommodation of stress by offsetting the pressure differential forces (see col. 11, lines 28-32).

With regard to claim 30, Agrawal et al. teach that the container does not have uniform wall thickness due to the differences in the amount of stretch in different areas. Stretching a preform with uniformly thick walls will result in a uniform decrease in thickness from the top to the bottom of the finished container.

With regard to claim 31, Agrawal et al. teach the invention of claim 30 as discussed above, but does not explicitly disclose the thicknesses of 0.7 mm at the mouth, 0.28 mm near the bottom, and 0.16 mm at the bottom of the container. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have used these thicknesses, since it has been held that discovering the optimum value of a result effective variable involves only routine skill in the art and it is well known that the thickness of a container is a result effective variable where the result is the crush strength of the container. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Response to Arguments

Applicant's arguments filed 14 April 2008 have been fully considered but they are not persuasive.

Applicant argues with respect to the 35 USC § 112 rejections. Applicant's arguments appear to be on the grounds that:

1) The amendment to the claims removes the requirement necessitating the rejection.

Applicant argues with respect to the 35 USC § 103(a) rejections. Applicant's arguments appear to be on the grounds that:

2) McHenry fails to teach a selectively collapsible feature because the McHenry's bottom wall requires more than eliminating pressure differentials. Specifically, an extra step to physically reform the container is required.

The Applicant's arguments are addressed as follows:

1) In view of Applicant's amendment of Claim 18 to remove the recitation of "wherein the bottom surface of the container is formed during thermoforming but before filling with hot food product and sealing, the Examiner withdraws the previously set forth 35 U.S.C. § 112, first paragraph, rejection as detailed in the Claim Rejections - 35 U.S.C. § 112 section of the Office Action dated 17 October 2007.

2) McHenry specifically teaches that the bottom wall may be reformed simply via external pressure or reducing internal pressure (see col. 8, lines 18-22).

2) Moreover, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., deforming does not comprise an extra step of physical reforming) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Butler whose telephone number is (571) 272-8517. The examiner can normally be reached on Mon.-Thu. 7:30 a.m.-5 p.m. and alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. B./
Examiner, Art Unit 1791

/Monica A Huson/
Primary Examiner, Art Unit 1791